

STATE of SOUTH CAROLINA
DEPARTMENT OF HEALTH and ENVIRONMENTAL CONTROL

**GENERAL CONDITIONAL MAJOR
OPERATING PERMIT (GCMP-03)**

**HOT MIX ASPHALT PLANTS
February 01, 2002**

In accordance with the provisions of the Pollution Control Act, Sections 48-1-50(5) and 48-1-110(a), and the 1976 Code of Laws of South Carolina, as amended, Regulation 61-62, the above mentioned sources are hereby granted permission to discharge air contaminants into the ambient air. The Bureau of Air Quality authorizes the operation of these sources in accordance with the plans, specifications and other information submitted in the General Conditional Major permit application. Sources operating under this general permit wish to limit their potential to emit as defined in South Carolina Air Pollution Control Regulation 61-62.1.

This permit is subject to and conditioned upon the terms, limitations, standards, and schedules contained in or specified on the attached pages of this permit.

Permit Number: [GCMP03xxxx-xxxx]

Issue Date: [February 01, 2002]

Expiration Date: [January 31, 2007]

DIRECTOR, ENGINEERING SERVICES DIVISION
BUREAU OF AIR QUALITY

GENERAL CONDITIONAL MAJOR OPERATING PERMIT
HOT MIX ASPHALT PLANTS
PERMIT NUMBER (GCMP-03)
PAGE 2 of 13
FEBRUARY 01, 2002

TABLE OF CONTENTS

Part 1.0. APPLICABILITY

- A. General Applicability
- B. Criteria

Part 2.0. STANDARD CONDITIONS

Part 3.0. SPECIAL CONDITIONS

- A. Emission Limitations
- B. Source Test Requirements
- C. Record keeping and Monitoring Requirements
- D. Reporting Requirements
- E. Control Equipment
- F. Operational Flexibility
- G. Exempt Equipment or Processes
- H. Additional Conditions

GENERAL CONDITIONAL MAJOR OPERATING PERMIT
HOT MIX ASPHALT PLANTS
PERMIT NUMBER (GCMP-03)
PAGE 3 of 13
FEBRUARY 01, 2002

PART 1.0. APPLICABILITY

A. GENERAL APPLICABILITY

In accordance with this general conditional major permit, a hot mix asphalt plant (facility) may operate under the conditions contained herein if it is comprised of one or any combination of the following: Auxiliary heaters (including hot oil heaters) with a heat input rate less than 10×10^6 (ten million) BTU per hour, asphalt and fuel storage tanks, dryers, systems for screening, handling, storing, and weighing hot aggregate, systems for loading, transferring, and storing mineral filler, systems for mixing hot mix asphalt, and the loading, transfer, and storage systems associated with emission control systems. Facilities operating under this permit seek to limit their potential to emit to below the thresholds which define a major source by complying with federally enforceable conditions contained in this permit. Soil remediation activities are not covered under this general permit.

For EPA New Source Performance Standards (NSPS) applicability *new facilities* are those constructed, reconstructed or modified after June 11, 1973. Facilities that began construction before this date are *existing facilities*.

B. CRITERIA

This general permit applies to hot mix asphalt plants meeting all of the following criteria:

- A. The facility is limited to Hot Mix Asphalt production only.
- B. The plant produces no more than 493,515 tons of Hot Mix Asphalt Concrete per rolling year (12 month rolling sum) for batch mix plants or 1,509,015 tons of Hot Mix Asphalt Concrete per year (12 month rolling sum) for drum mix plants.
- C. The maximum size for a single Auxiliary Heater in operation at one time is less than 10 million BTU/hr heat capacity input.
- D. All Sources fired at the facility are limited to natural gas, propane, liquefied petroleum gas, virgin fuel oil, or Department approved waste oil streams.
- E. The operational restrictions of the facility limits its potential to emit to below major source thresholds. Specifically, potential for SO₂, PM, and NO_x emissions are less than 100 tons per year and hazardous air pollutant (HAP) emissions are less than 10 tons per year individually or 25 tons per year combined.

GENERAL CONDITIONAL MAJOR OPERATING PERMIT
HOT MIX ASPHALT PLANTS
PERMIT NUMBER (GCMP-03)
PAGE 4 of 13
FEBRUARY 01, 2002

- F. All emergency generators fired on diesel fuel are limited to 250 hours each of operation during the calendar year.
- G. The owner or operator of the facility has submitted a timely and complete application for this general permit to the Department.

PART 2.0. STANDARD CONDITIONS

The following conditions are applicable unless superseded by special permit condition(s):
All conditions marked with an asterisk shall be considered federally enforceable.

- 1. Permit expiration terminates the source's right to operate unless a complete renewal application has been submitted by the application renewal date. Upon receipt of an application for renewal, the source may continue to operate subject to final action by the Department on the renewal application.
- 2. An operating permit modification or renewal may be issued upon evidence of satisfactory operation during the prior operating period and receipt of a complete application.
- 3. This general permit has been issued based on information submitted by the owner/operator in the application. Any false information or misrepresentation in the application may be grounds for permit revocation.
- * 4. This general permit expressly incorporates all the provisions of South Carolina Department of Health and Environmental Control Regulation 61-62.1, Section II.C.
- 5. No deviation from the plans and specifications reflected in the permit application as submitted is allowed, unless authorized in writing by the Bureau.
- 6. This general permit only covers emission sources and control equipment while physically located at the permitted plant location. Unless the permit specifically provides for equipment relocation, this general permit is void for an item of equipment on the day it is removed from the permitted location, notwithstanding the expiration date specified on the permit.
- * 7. Whenever the ownership/operation of a facility has been transferred, the Bureau shall be notified by the new owner/operator within thirty (30) days of the transaction. A transfer of this permit will be effective upon written approval by the Department.

GENERAL CONDITIONAL MAJOR OPERATING PERMIT
HOT MIX ASPHALT PLANTS
PERMIT NUMBER (GCMP-03)
PAGE 5 of 13
FEBRUARY 01, 2002

- * 8. In accordance with SC Regulation 61-62.1, Section II, the permittee must comply with all applicable statutes and regulations of the United States and the State of South Carolina. This permit does not relieve the permittee from compliance with applicable local laws, ordinances, and regulations. The Department may grant permission to proceed with minor alterations or additions without issuance of a permit when the Department determines that the alteration or addition will not increase the quantity and will not alter the character of the source's emissions. Any owner/operator who plans to construct, alter, or add to a source of air contaminants, including the installation of any device for the control of air contaminant discharges shall submit a complete construction permit application package. The construction of the new or modified source shall not commence until the source has received an effective permit to construct from the Department.

- * 9. For all sources not required to have continuous emissions monitors the owner/operator shall, at all times, including periods of startup, shutdown, and malfunction, maintain and operate these sources in a manner consistent with good air pollution control practice for minimizing emissions to the maximum extent practicable. In accordance with S.C. Regulation No. 61-62.1 Section II(C)(3), in the event of any malfunction of air pollution control equipment or system, process upset or other equipment failure which results in discharges of air contaminants lasting for one hour or more and which are greater than those discharges described for normal operation in the permit application shall be reported to the local Environmental Quality Control (EQC) District office within twenty-four (24) hours after the beginning of the occurrence. The owner/operator shall also submit a written report within thirty (30) days of the occurrence. This report shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality (BAQ). The report shall contain as a minimum, the following: the identity of the emission point and associated equipment where excess emissions occurred, the magnitude of excess emissions, the time and duration of excess emissions, the steps taken to remedy the malfunction and to prevent a recurrence, documentation that control equipment and processes were at all times maintained and operated, to the maximum extent practicable, in a manner that was consistent with good practice for minimizing emissions. Such a report shall in no way serve to excuse, otherwise justify, or in any manner affect any potential liability or enforcement action resulting from the occurrence.

- 10. Any authorized agent of the Department, upon presentation of credentials, shall be allowed to enter the grounds of this facility during reasonable hours, to inspect any equipment required to be kept, used, calibrated, and maintained under this permit; to obtain samples of emissions; to have access to and a right to copy records required under this permit; to photograph and use monitoring and testing equipment for the purpose of monitoring and preserving information on activities, discharges or emissions authorized by this permit.

GENERAL CONDITIONAL MAJOR OPERATING PERMIT
HOT MIX ASPHALT PLANTS
PERMIT NUMBER (GCMP-03)
PAGE 6 of 13
FEBRUARY 01, 2002

11. The general permit for the facility may be reopened for cause by the Department or to include any new standard or regulation which becomes applicable to a source for which three or more years remain on the original term of the permit.
- * 12. The permittee shall pay fees in accordance with SC Regulation 61-30, SC Environmental Protection Fees.
- * 13. In accordance with South Carolina Regulation 61-62.1, Section III, every even calendar year an emissions inventory will be completed for the previous calendar year and submitted to the Department by March 31. The above requirement notwithstanding, an emissions inventory may be required at any time in order to determine the compliance status of any plant.
14. No deviation from the plans and specifications submitted with the construction permit application or the conditions specified herein is permitted, unless authorized in writing by the Department. The owner/operator is responsible for satisfactory compliance with all Air Pollution Regulations /and Standards.

PART 3.0. SPECIAL CONDITIONS

This permit is subject to all standard conditions contained herein and to the following special conditions. **All conditions or requirements marked with an asterisk are considered federally enforceable.**

A. EMISSION LIMITATIONS

Air pollutant emissions shall not exceed the following:

<u>IDs</u>	<u>Pollutant</u>	<u>Emission Limitation</u>	<u>Test Method</u>
Auxiliary heaters (SC Reg 61-62.5 Standard 1)	SO ₂	3.5 lbs/10 ⁶ BTU ³	6
	PM	0.6 lbs/10 ⁶ BTU	5
	Opacity	20% ³	9
		40% ^{1,3}	9
New Facilities (NSPS, Subpart I)	PM	0.04 gr/dscf ^{2,3}	5

GENERAL CONDITIONAL MAJOR OPERATING PERMIT
HOT MIX ASPHALT PLANTS
PERMIT NUMBER (GCMP-03)
PAGE 7 of 13
FEBRUARY 01, 2002

Existing Asphalt Facilities:

<u>Process Rate</u> (Tons per hour)	<u>Pollutant</u>	<u>Emission Limitation</u>	<u>Test Method</u>
20	PM	22 lbs/hr	5
50	PM	31 lbs/hr	5
100	PM	38 lbs/hr	5
150	PM	45 lbs/hr	5
200	PM	51 lbs/hr	5
250	PM	56 lbs/hr	5
300	PM	61 lbs/hr	5
?350	PM	65 lbs/hr	5
All Facilities	Opacity	20%	9

¹Applies to fuel burning operations constructed prior to February 11, 1971.

²Grains per dry standard cubic foot (gr/dscf).

³**Emission limitations are federal enforceable.**

The above emission limitations are derived from various Federal and State regulations that govern the operation of these sources. Operation at other than reported capacity must meet emission limits as specified in the applicable regulations based on that operating rate but shall not exceed the values reported to the Department for proof of compliance with South Carolina Regulation 61-62.5, Standards 2, 7, and 8. All test methods must be the most recent revisions that are published in the Code of Federal Regulations (40 CFR 60, Appendix A) as in effect on the date of this permit issuance, or otherwise approved by the Bureau.

B. SOURCE TEST REQUIREMENTS*

This facility is required to source test for determination of particulate matter emissions every two years. Test protocol(s) shall be conducted according to S.C. Department of Health and Environmental Control Regulation 61-62.5, Standard 4, Section XII.

1. The source test(s) shall be conducted while the source is operating at maximum production rate. Retests may be required if facilities exceed their maximum allowable production rate as determined by “Asphalt Plant Aggregate Moisture vs. Hot Mix Asphalt Production Potential Guidance” of March 15, 2001, as amended.
2. During testing the source shall produce surface mix, unless an alternate mix is approved by the Department.

GENERAL CONDITIONAL MAJOR OPERATING PERMIT
HOT MIX ASPHALT PLANTS
PERMIT NUMBER (GCMP-03)
PAGE 8 of 13
FEBRUARY 01, 2002

3. Source test shall be conducted on a virgin aggregate mix, or up to 25% Reclaimed Asphalt Pavement (RAP).
4. The percent (%) moisture of the aggregate shall be obtained for each source test series.
5. The requirement to source test for particulate matter may be waived at the discretion of the Department for existing asphalt facilities that have a baghouse operating in a satisfactory manner.

C. RECORD KEEPING AND MONITORING REQUIREMENTS*

The owner/operator shall keep records on-site of required monitoring information in accordance with specifications set by the Department. This includes all of the following:

1. The date, place, and time of sampling measurements.
2. The date(s) analyses were performed.
3. The company or entity that performed the analyses.
4. The methods or analytical techniques used in the analyses.
5. The results of all such analyses.

The owner/operator shall also maintain records of the following monitoring.

1. Records of monthly Hot Mix Asphalt production in tons of asphalt per month including a twelve month rolling sum of asphalt production.
2. Facilities that have gained authorization for the use of recycled oil as fuel must maintain the following information for each shipment: date and total amount of specification oil received, chemical analyses on the fuel oil for: total halogen, total lead, total chromium, total cadmium, total arsenic, total nickel, percent (%) sulfur and BTU content; additionally all shipments or batches shall be certified as PCB free. Copies of all analysis shall be kept.
3. Records of emergency and portable generator(s) use in hours per month (to be reported yearly on a calendar year basis) and a twelve month rolling sum of hours of operation for non-emergency generators.
4. System pressure drop on baghouse to be monitored and recorded daily (excluding bin vents).

GENERAL CONDITIONAL MAJOR OPERATING PERMIT
HOT MIX ASPHALT PLANTS
PERMIT NUMBER (GCMP-03)
PAGE 9 of 13
FEBRUARY 01, 2002

Records of all required source testing, monitoring data, and support information shall be retained on site for a period of at least five (5) years from the submittal date of the initial application. Support information includes any relevant documentation from the supplier(s) of the fuel oil, fuel analysis as applicable, fuel usage, hot mix asphalt production, and copies of all reports required by the permit. The Department must grant approval of any alternative method of monitoring or record keeping.

D. REPORTING REQUIREMENTS *

The owner/operator shall meet the following requirements with respect to reporting:

1. Submit quarterly reports of Hot Mix Asphalt production records, recycled oil, if applicable, and non-emergency generator use required in Part 3.0, Section C.
2. Emergency and portable generator use is to be reported yearly on a calendar year basis.
3. The Department may, after the first twelve months of initial coverage, decrease the frequency of reports based on actual emissions. Requests for a decrease in reporting frequency should be made in writing to the Manager of the Technical Management Section, Bureau of Air Quality. During permit renewal, a request for a decrease in reporting frequency may be included in the renewal application under Part J., *Monitoring, Recordkeeping, and Reporting Plans*.

If a decrease in reporting frequency has been approved prior to renewal of a permit, the reduced reporting frequency may be continued after renewal provided that actual emissions have not changed.

If a facility is reporting at a decreased frequency and actual emissions increase, the Department may require an increased reporting frequency.

4. All reports should be addressed to the Manager of the Technical Management Section, of the Bureau of Air Quality, and should be post marked no later than 30 days following the end of the reporting period.

E. CONTROL EQUIPMENT *

The owner/operator shall, to the extent reasonably practicable, maintain and operate any source including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions. In addition, the owner/operator shall maintain a log of the time, magnitude, duration and/or any other pertinent information necessary to determine periods of startup, operation, shutdown and malfunction of a permitted facility or any periods during which a continuous monitoring system or monitoring device (if applicable) is inoperative. These records shall be maintained on site for a period of no less than five years following the event and shall be made readily available to representatives of this Department upon request.

GENERAL CONDITIONAL MAJOR OPERATING PERMIT
HOT MIX ASPHALT PLANTS
PERMIT NUMBER (GCMP-03)
PAGE 10 of 13
FEBRUARY 01, 2002

F. OPERATIONAL FLEXIBILITY

The following operational scenarios are allowed. No further action is required by the owner/operator prior to making the changes described below:

1. The use of a fuel oil with a lower sulfur content than what was submitted as part of the permit application.
2. On site unit relocation, provided that the permittee has demonstrated compliance with emission limitations at the new location, specifically the limitations contained in SC Regulation 61-62.5, Standards 1, 2, 7, and 8.

G. EXEMPT EQUIPMENT OR PROCESSES

The following is a list of equipment or processes emitting regulated air pollutants which are exempt from permitting due to insignificant emissions.

1. Emergency power generators of less than 150 KW rated capacity, or those which operate 250 hours per year or less and have a method to record the actual hours of use such as an hour meter.
2. Auxiliary heaters rated at less than 1.5×10^6 (1.5 million) BTU per hour heat input capacity which burn only virgin fuels.
3. All storage tank(s) with a capacity less than 40 cubic meters (10,547 gallons) that store organic liquids, excluding those that store a hazardous air pollutant except as an impurity.
4. Lab-scale and testing operations used for the purposes of research and development and/or quality control only.
5. Any equipment used solely for the purpose of firefighting.

GENERAL CONDITIONAL MAJOR OPERATING PERMIT
HOT MIX ASPHALT PLANTS
PERMIT NUMBER (GCMP-03)
PAGE 11 of 13
FEBRUARY 01, 2002

H. ADDITIONAL CONDITIONS

- * 1. The total yearly hot mix asphalt production for this facility shall not exceed 493,515 tons per year for batch mix plants or 1,509,015 tons per year for drum mix plants.
- 2. Facilities which source test at less than permitted capacity shall be re-assessed, and the production rate may be limited by the Bureau to reflect the new tested rate (corrected to 5% moisture).
- * 3. All new facilities subject to 40CFR60, Subparts A and I shall comply with all requirements for notifications, monitoring, testing, record keeping and reporting required in these Regulations.
- * 4. All boilers subject to 40CFR60, NSPS Subparts A and Dc shall comply with all requirements for notifications, monitoring, testing, record keeping and reporting required in these Regulations. If applicable, this includes supplier certification of the fuel to ensure sulfur content of 0.5% or less and semiannual reports of such certification.
- 5. Natural gas, propane, liquefied petroleum gas, fuel oil and/or recycled oil (with prior written approval from this Department) shall be the only fuels to be fired in dryer burners and auxiliary heaters.
- 6. Facilities that have the authorization to burn recycled/waste oil as fuel shall maintain records of the following information:
 - a. For each shipment, date and total amount of specification oil received.
 - b. On site generated specification oil usage and dates.
 - c. Chemical analysis of the fuel oil for total halogens, total lead, total chromium, total cadmium, total arsenic, total nickel, percent sulfur and BTU content shall be performed on each shipment or annual sampling of on site batches.
 - d. Constituents for the fuel oil can not exceed those defined for ?specification?oil in SC Regulation 61-62.1.

GENERAL CONDITIONAL MAJOR OPERATING PERMIT
HOT MIX ASPHALT PLANTS
PERMIT NUMBER (GCMP-03)
PAGE 12 of 13
FEBRUARY 01, 2002

7. The use of any non-specification oil, hazardous waste, or any other waste chemical as a fuel or any addition of these items to the fuel shall not be allowed without prior written approval from the Department.
8. The use of materials, other than virgin aggregate and reclaimed asphalt pavement (RAP), as aggregate for the asphalt mix shall not be allowed without prior written approval from this Department.
9. Lime/Flyash silo baghouse(s) shall be inspected for leaks and visible emissions in the exhaust while the silo(s) is/are being loaded.
10. Ruptured or inoperative bags shall be replaced promptly. The owner/operator shall maintain an inventory of filter bags such that an adequate supply of bags are on hand to replace any defective bags in each baghouse.
11. The operator shall perform daily visual inspections during normal plant operation of equipment, loading/unloading areas, any mixing areas, and any air pollution control equipment. Daily inspections must be documented by an entry which includes the date performed, the inspector's name or initials, the operating conditions of the equipment.
12. Fugitive emissions of particulate matter must be controlled by wet suppression, chemical dust suppressants, or in any other manner which has received prior approval from this Department. The control of fugitive emissions shall include, but not be limited to, the property around the plant itself, all material handling, transportation or storage operations and **all** entrances through which motor vehicles travel. Visible emissions from this operation shall not exceed the allowable emission limitation.
13. The following devices as applicable shall be installed and operated on each piece of pollution control equipment listed in the application:
 - a. System pressure drop gauges and cleaning cycle timers shall be installed, operated, and maintained on each baghouse, excluding binvent baghouses.
 - b. System pressure drop gauges and water pressure gauges or water flowmeters shall be installed, operated and maintained on each wet scrubber module.
14. System pressure drop shall be monitored and recorded daily at each scrubber or baghouse as applicable.

GENERAL CONDITIONAL MAJOR OPERATING PERMIT
HOT MIX ASPHALT PLANTS
PERMIT NUMBER (GCMP-03)
PAGE 13 of 13
FEBRUARY 01, 2002

- * 15. Each storage tank(s) subject to 40CFR60, NSPS Subparts A and Kb shall comply with all requirements for notifications, monitoring, record keeping, and reporting required in these regulations. Records of tank size and type of material stored shall be maintained on any tank constructed, reconstructed, or modified after July 23, 1984.
- * 16. The permitted facility shall have emission limitations less than 100 TPY for SO₂, CO, PM₁₀ and NO_x (each pollutant) and less than 10 tons per year individually or 25 tons per year combined of any HAP. Compliance with these limitations will be demonstrated by twelve (12) month rolling sums of asphaltic concrete production.

Supplemental Limiting Reference Chart

	Asphalt Production	Recycled Fuel	Generator Use	Emergency Generator Use
L I M I T	Batch Mix: 493,515 tons per year Drum Mix: 1,509,015 tons per year	*See SC Regulation 61-62.1	*See Cover Sheet	250 hours per year

- 17. Prior to the expiration date of this general conditional major operating permit, a representative of the Department may conduct a facility inspection. The findings of this inspection, past record of compliance, and future probability of compliance will be given appropriate weight in making the decision regarding permit renewal.
- 18. Prior to relocation to another site in South Carolina, approval must be granted by the Bureau of Air Quality to continue coverage under this General Permit.
- 19. If the EPA determines that area sources subject to NSPS requirements must obtain Part 70 permits, sources shall submit Part 70 permit applications by December 9, 2005. Sources must continue to comply with the provisions of all applicable NSPS standards.
- 20. The use of any non-specification oil, hazardous waste, or any other waste chemical as a fuel or any addition of these items to the fuel shall not be allowed without prior written approval from the Department.
- 21. Prior to the expiration date of this general conditional major operating permit, a representative of the Department may conduct a facility inspection. The findings of this inspection, past record of compliance, and future probability of compliance will be given appropriate weight in making the decision regarding permit renewal.